

### **Abstract of the Disclosure**

A method selects multiple paths between a server and a client in an overlay network where nodes are connected by links. The nodes include the server and the client. Each path includes a set of selected links. First, in each node, Quality of service metrics are measured of each link directly connecting the node to an immediate neighboring node. The metrics are transmitted to the server. In the server, a link correlation matrix based on the metrics and a path correlation matrix based on the link correlation matrix are determined. Then, the multiple paths are selected based only on the metrics, the link correlation matrix, and the path correlation matrix.